Docket Number: 1386-2

METHOD AND APPARATUS FOR STORING A MOP

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention generally relates to devices used for cleaning and maintenance, and more particularly to a method and apparatus for storing a waxing or finishing mop following its use.

Description of the Prior Art

Nearly all homes and commercial buildings have extensive floor surfaces that require waxing and finishing. Wax mops have long been the tool of choice for these tasks with few significant modifications in their original design. Such mops may be used to finish and distribute wax evenly and effectively over a variety of floor compositions.

A common problem with using these mops arises after the job has been completed. Typically, the wax mop is stored in a plastic bag in a closet or utility area until its next use. However, during the interim, the mop head may dry out, which ends its usable life.

Another problem is that finishing and waxing material retained in the mop head drips onto the floor, or somewhere equally wasteful, where it must be removed and discarded. This results in a substantial waste of valuable waxing material.

OBJECTS AND SUMMARY OF THE INVENTION

It is an object of the present invention to provide a method and apparatus that enable storage of a wax mop after each use while enabling waxing and/or finishing material left on the mop to be reused.

It is another object of the present invention to provide a method and apparatus that prevent a wax mop from drying out after use.

It is yet another object of the present invention to provide a method and apparatus that enable collection and retention of residual waxing material from a wax mop after use so that the waxing material may be reused while preventing debris and other contaminants from mixing with the collected waxing material.

It is still another object of the present invention to provide a method and apparatus for storing a wax mop that is relatively simple and cost-effective to manufacture, purchase, and use.

A mop storage container formed in accordance with one form of the present invention, which incorporates some of the preferred features, includes a lower housing and an upper housing. The lower housing includes an upper side and at least one first opening disposed on the upper side. The upper housing includes first and second members extending upwardly from the lower housing.

The first opening is in fluid communication with the upper housing and at least one of the first member and the second member is flexibly attached to the lower housing. The first member and the second member are adapted to receive a head of the mop in the upper housing when spread apart, and are adapted to substantially contain the head of the mop when brought together.

A method of storing a mop after its use in accordance with one form of the present invention, which incorporates some of the preferred features,

includes the steps of providing a lower housing and an upper housing and flexibly attaching at least one of the first member and the second member to the lower housing. The lower housing includes an upper side and at least one first opening disposed on the upper side. The upper housing includes first and second members extending upwardly from the lower housing. The first opening is in fluid communication with the upper housing.

The method also includes the steps of separating the first member and the second member and inserting a head of the mop. The method further includes the steps of bringing the first member and the second member substantially together around the head of the mop in the upper housing and collecting fluid in the lower housing that has dripped from the head of the mop through the first opening.

These and other objects, features, and advantages of this invention will become apparent from the following detailed description of illustrative embodiments thereof, which is to be read in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view of a mop storage container formed in accordance with the present invention.

Figure 2 is a cross-sectional view of the mop storage container shown in Figure 1 taken along line AA' in a closed state.

Figure 3 is a cross-sectional view of the mop storage container shown in Figure 1 taken along line AA' in an open state.

Figure 4 is a top view of a strainer for use in the mop storage container shown in Figure 1.

Figure 5 is partial bottom view of the mop storage container formed in accordance with the present invention showing a drainage opening for recovering residual waxing and/or finishing material.

Figure 6 is a cross-sectional view of the mop storage container including a pitched strainer and a pitched lower housing.

Figure 7 is cross-sectional view of the mop storage container including a drainage opening located on a side surface of the lower housing.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Figure 1 shows a perspective view of a mop storage container 10 formed in accordance with the present invention. The mop storage container 10 preferably includes an upper housing 12 and a lower housing 14. The upper housing 12 is preferably adapted for storing a waxing or finishing mop. However, it is contemplated that the mop storage container 10 may be used to store a variety of maintenance implements while providing similar benefits. The lower housing 14 is preferably adapted for collecting and storing residual waxing and/or finishing material that has dripped from the mop stored in the upper housing 12.

The upper housing 12 preferably includes a first member 16 and a second member 18 that extend upperwardly from the lower housing 14. At least one of the first member 16 and the second member 18 is hinged to the lower housing 14. Alternatively, the upper housing 12 and lower housing 14 may be manufactured as a single unit having flexible first and second members 16, 18 that enable repeated insertion and extraction of the mop.

The upper housing 12 preferably also includes one or more latching mechanisms 20, such as tension clasps commonly used on toolboxes, which are adapted to retain the first member 16 and the second member 18 in a closed state around the wax mop. The latching mechanisms 20 are preferably

located along the boundary between the first member 16 and the second member 18. A handle 22 is preferably attached to the mop storage container 10 to enable it to be moved to another location with or without the mop.

As shown in Figures 2 and 3, a handle 24 of the wax mop preferably extends through an opening in the upper housing 12. A first gasket 26 is preferably disposed between the opening in the upper housing 12 and the handle 24 of the wax mop. The first gasket 26 is preferably split to permit the handle 24 to be inserted within the first gasket 26.

One or more additional gaskets 28 are preferably disposed between the first member 16 and the second member 18, as well as between the upper housing 12 and the lower housing 14, as shown in Figures 1-3. The gaskets 26, 28 preferably provide a seal between the moving parts of the mop storage container, such as the first member 16 and the second member 18, while retaining moisture within the mop storage container 10 to prevent the wax mop head 30 from drying out during storage.

As described above, at least one of the first member 16 and the second member 18 are preferably connected by hinges 32 to the lower housing 14. To store the wax mop in the mop storage container 10, the first member 16 and the second member 18 are preferably separated, as shown in the cross-sectional view of Figure 3, to allow the wax mop to be inserted in the upper housing 12. The first member 16 and second member 18 are then preferably brought together around the wax mop, as shown in the cross-sectional view of Figure 2.

A strainer 34 is preferably disposed within the mop storage container 10 between the upper housing 12 and the lower housing 14. Residual finishing and/or waxing material preferably drips from the mop head 30 stored in the upper housing 12 through the strainer 34 and is collected in the lower housing 14.

The strainer 34 is preferably removable from the mop storage container 10 to enable the strainer 34 to be cleaned and to provide access to the interior of the lower housing 14 through the upper housing 12. Figure 4 shows a preferred embodiment of the strainer 34, although any number, sequence, and/or shape of openings 36 in the strainer 34 are contemplated to be within the scope of the present invention. The openings 36 are preferably fine enough to prevent debris and other contaminants from passing from the upper housing 12 into the lower housing 14 and mixing with the waxing and/or finishing material collected therein.

As shown in Figures 2 and 3, the lower housing 14 preferably includes a drainage opening 40, which simplifies retrieval of the waxing and/or finishing material collected in the lower housing 14. A plug 38 is preferably used to selectively close the opening 40 in the lower housing 14 during storage of the wax mop. Figure 5 shows the opening 40 in a bottom surface of the lower housing 14.

The upper housing 12 preferably has a wedge shape with angularly shaped external side surfaces when the first member 16 and the second member 18 are brought together in a closed state. This preferably biases the first and second members 16, 18 towards each other so that the mop storage container 10 exhibits a tendency to remain in a closed state.

The overall dimensions of the mop storage container 10 are preferably about 12 inches in length and 8 inches in width. The depth of the upper housing 12 is preferably about 5 inches and the depth of the lower housing 14 is preferably about 3 inches.

As shown in Figure 6, the bottom surface of the lower housing 14 may be pitched downward towards the opening 40 to enable residual waxing and/or finishing material to flow more readily towards the opening 40.

Likewise, the strainer 34 may be pitched downward to direct waxing and/or finishing material through the openings 36 in the strainer 34. The opening 40 may alternatively be located on a side surface of the lower housing 14, as shown in Figure 7.

The mop storage container 10 is preferably made from plastic, rubber, acrylic, resin, and/or other materials that are substantially resistant to waxing and/or finishing materials. The mop storage container 10 is preferably manufactured in a variety of sizes and colors to suit particular home, commercial, and/or industrial consumer markets.

Thus, the mop storage container and method formed in accordance with the present invention substantially prevent the wax mop from drying out during storage, which makes premature replacement of the mop head unnecessary. Further, the mop storage container and method permit collection and subsequent reuse of waxing and finishing material that has dripped from the mop head while being stored. In addition, the mop storage container is relatively simple and cost-effective to manufacture, purchase, and use.

Although illustrative embodiments of the present invention have been described herein with reference to the accompanying drawings, it is to be understood that the invention is not limited to those precise embodiments, and that various other changes and modifications may be effected therein by one skilled in the art without departing from the scope or spirit of the invention.